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U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5
INITIAL POLLUTION REPORT

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I. HEADING

Date: June 5, 1997
Subject: Chicago Metro Methyl Parathion Sites, Cook County, Il.
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POLREP # 1

II. BACKGROUND

Site No: A594	Delivery Order No: 5001-05-418
CERCLIS No: IL0001907583	ERNS No:
Response Authority:	NPL Status: Non-NPL
State Notification: Y	Start Date: Pending
Demobilization Date: N/A	Completion Date: N/A
Status of Action Memorandum: Draft at HQ for Signature	

III. SITE DESCRIPTION

A. Incident Category:

The site consists of up to 1,000 homes and other commercial buildings with indoor contamination from spraying of the pesticide methyl parathion. The homes and building are primarily in the Chicago City Limits, but there are at least 25 homes in the Maywood, Bellwood and outer Cook County municipalities.

B. Site Location:

1. Site description:

In early April 1997, information given to U.S. EPA Region V personnel from authorities in Mississippi, led to the discovery of a methyl parathion (MP) spraying operation in the Chicago area. On April 9, 1997, U.S. EPA seized more than 20 gallons of MP concentrate, spraying equipment, miscellaneous empty containers of MP, and business records from the home of Ruben Brown in west suburban Bellwood, Illinois, under a civil warrant. The seized materials were inventoried, over packed, and transferred to a secured storage yard at an Illinois State Police facility in DesPlaines, Illinois. Selected containers and all spray equipment were sampled. One set of samples was delivered to the Illinois Department of Public Health (IDPH) laboratory in Springfield, Illinois, for analysis. The remaining two sets are being held by U.S. EPA. Mr. Brown was arrested on April 24, 1997. A press release occurred the same day. The press release included a toll-free hotline for the public to call with questions, concerns, or to set up a pick up of containers of MP purchased from Brown. To date the hotline has received more than 80 calls.

The logbooks and receipt books seized by U.S. EPA included several hundred names, addresses, and phone numbers of Brown's customers. The potentially-contaminated homes are located throughout Chicago's south and west sides, as well as neighboring west suburbs. The addresses from the log books were entered into a Data Base file to interpret the large number of homes.

2. Description of threat:

Methyl parathion (MP) is a restricted use pesticide intended for outdoor use, primarily on cotton fields. MP is quickly degraded outdoors by sunlight and moisture. MP may persist indoors for two years. Residents of homes sprayed with MP are at risk of exposure by direct contact, inhalation, and ingestion.

V. RESPONSE INFORMATION

A. Situation

1. Current situation:

A multi-agency task force has been assembled to manage the Chicago area methyl parathion problem. This task force, assembled under direction of U.S. EPA included U.S. EPA, Illinois Environmental Protection Agency (IEPA), IDPH, Illinois Department of Agriculture (IDA), the Agency for Toxic Substances and Disease Registry (ATSDR), Cook County Health Department (CCHD), Chicago Department of Health, Chicago Department of Environment (CDOE), and Illinois Extension Service. Six task force meetings have been held to establish the project structure and determine resources and manpower to be provided by various agencies.

U.S. EPA has assembled environmental and enforcement sample teams comprised of U.S. EPA Pesticides personnel, IDPH personnel, IEPA, IL. Dept. Of Ag., Chicago Department of Environment, and schedulers from the Chicago Dept. Of Health, to collect wipe samples from residences. Another Team was established by the Emergency Response Branch to collect containers of MP left at homes by Ruben Brown. To Date, approximately 10 containers have been picked up and will be disposed of properly. In planning for the removal action, U.S. EPA has also assembled relocation, decontamination, and restoration teams.

Environmental Characterization Teams:

To date, the U.S. EPA sampling team has collected wipe samples from 111 individual dwellings. IDPH earlier collected wipe samples from eight additional residences. Results of the first seven wipe sample locations averaged approximately 1,700 $\mu\text{g}/100\text{ cm}^2$. Currently, three sampling teams have been assembled and a fourth will be added to collect up to 100 environmental wipe samples per week.

The container collection team has retrieved MP containers from nine residences. These containers and liquids which were seized from Ruben Brown and other residents were packed and shipped to be incinerated. Samples were collected from each of the four containers. One additional resident refused to allow U.S. EPA personnel to take his container of suspected MP, but allowed them to collect a sample.

Biological Characterization Team:

The biological characterization team is comprised of Chicago Department of Health, Cook County Health Department, and ATSDR. They have been engaged in planning activities and ordering supplies. The team is planning to begin urine sampling of residents on June 3, 1997 and the urine samples were shipped to the Center for Disease Control (CDC) lab in Atlanta. To date, only two residents have been biologically sampled.

The Chicago Department of Health has 5-6 public health nurses collecting the urine samples. The Biological Sampling team estimates that they can collect urine samples from 15-30 residences per week. At 15 residences per week, assuming 1,000 residences and quarterly monitoring for 25% of the homes the sampling will continue until **January of 1999**.

Relocation and Restoration Teams:

Relocation and restoration teams have completed interagency agreements with U.S. Army Corps of Engineers (USACE). A list of 10 apartments has been submitted by the USACE and leases are awaiting signature once the referral to relocate residences comes from the IDPH. Another block of apartments will be secured on the West Side of Chicago and potentially on the South West Side of Chicago around Midway Airport.

Decontamination Team:

The decontamination team has been researching decontamination methods and other related issues used for other methyl parathion cleanup projects. The Decon team is reviewing the ERT document which shows promise to using oil based sealers to decon walls.

Analytical:

U.S. EPA is coordinating with labs planning to analyze environmental samples to establish QA/QC protocol. The U.S. EPA Central Regional Lab and Illinois Department of Public Health are currently running all of the Environmental Samples. The CDC lab in Atlanta is running the Biological Sampling.

Public Communication and Outreach:

U.S. EPA, ATSDR, and local and state health agencies have been coordinating the production of fact sheets and a program to educate health professionals and the public. A Community Information Center is being established at 10 S. Kedzie in Chicago and will have schedulers, Community Information Specialists, Technical Representatives, and the Hotline number to answer residential needs and concerns.

2. Removal activities to date:

A delivery order was issued for ERCS to initiate arrangements for disposal of the MP liquid, lease office space for the command post, prepare the site removal health and safety plan, and assist with retrieval of containers of MP from homes. The retrieval of 10 containers of MP from residences was accomplished. A command post has been leased at 3349 S. Kedzie. The U.S. EPA and other agencies will staff the Command Post and run all of the Sampling, Relocation, Decontamination, and Restoration operations out of this property.

3. Planned Removal Actions

- HQ to sign Action Memo
- Complete additional IAG's with USACE for relocation and restoration
- Establish a command post
- Arrange disposal of Personnel Protective Equipment
- Begin biological monitoring
- Continue environmental sampling
- Relocation of residents
- Decontamination and restoration of homes
- Return Residents to their homes

C. Next Steps

- Continue Environmental Sampling
- Begin biological monitoring
- Prepare for relocation, decontamination, restoration of residential home once referred by IDPH.

D. Key Issues

Health officials and U.S. EPA are working to conduct a Fact Sheet that focuses on health issues and community concerns. A letter has been drafted and will be sent to the residents that have been sprayed by Ruben Brown. The letter will be sent the week of June 6, 1997 and will give the HOTLINE number and U.S. EPA community affairs specialist numbers.

The National Steering Committee has established the following action levels and Guidance for Removal Action at Methl Parathion Sites:

ACTION LEVELS FOR THE CHICAGO METHYL PARATHION PROJECT				
Age Group	Recommended Action			Comments
	No Further Action	Urine Monitoring	Relocation	
0 - 12 months and Pregnant Mothers	<25 ppb in urine and <50 µg/100 cm ² exposure based sampling	25-50 ppb in urine; or <25 ppb in urine and >50 µg/100 cm ² exposure based sampling	>50 ppb in urine	Frequency of urine once a quarter until the infant reaches 12 months of age. For all other groups, monitoring will be conducted on a quarterly basis (regular intervals) to confirm that the exposure scenario is one where no urine values are increasing.
12 months -16 yrs	<100 ppb in urine and <50 µg/100 cm ² exposure based sampling	100-300 ppb in urine; or <100 ppb in urine and >50 µg/100 cm ² exposure based sampling	>300 ppb in urine	Once urine samples are decided to be collected in a house, all residents are offered to be monitored. Any one individual from any category exceeding benchmarks established will trigger relocation.
>16 years	<300 ppb in urine and <50 µg/100 cm ² exposure based sampling	300-500 ppb in urine; or <300 ppb in urine and >50 µg/100 cm ² exposure based sampling	>600 ppb in urine	If two consecutive samples fall below the benchmark for urine monitoring, the monitoring will be discontinued.

V. COSTS

	<u>Costs (as of)</u>	<u>Amount Remaining</u>
ERCS	23,076	126,924
START	5,500	
U.S. EPA	10,500	

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor. Other financial data, which the OSC must rely upon, may not be entirely up to date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI. DISPOSITION OF WASTES

One drum of methyl parathion liquid and containers were shipped to for incineration.

One rolloff box of non-hazardous debris is staged at the Smith Riedel Warehouse in Mt. Prospect, Illinois to dispose of PPE and other non-Hazardous debris.